FortiAnalyzer - Release Notes

VERSION 5.6.0

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FortiAnalyzer - Release Notes

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TABLE OF CONTENTS

Change Log

Date	Change Description
2017-07-27	Initial release of 5.6.0.
2017-07-27	Updated to add ESX VM network mapping after upgrade on page 11.
2017-08-03	Added bugs to Known Issues.
2017-08-09	Added 443462 to *Known Issues* > *Reporting*.
2017-08-14	Added *Special Notices* > *Port 8443* reserved.
2017-08-15	Added *Product Integration & Support* > *FortiClient* > *5.4.0 and later, and 5.6.0* support.
2017-08-21	Updated *Special Notices* > *System Configuration or VM License is Lost after Upgrade*.
2017-08-24	Updated *Upgrade Information* > *Upgrading to FortiAnalyzer 5.6.0*.
2017-10-27	Added note about LENC device support.
2017-11-20	Added 2.4.0 and 2.4.1 support to *Product Integration & Support* > *FortiSandbox*.

Introduction

This document provides the following information for FortiAnalyzer version 5.6.0 build 1557:

For more information on upgrading your FortiAnalyzer device, see the *FortiAnalyzer Upgrade Guide*.

Supported models

FortiAnalyzer version 5.6.0 supports the following models:

FortiAnalyzer	FAZ-200D, FAZ-300D, FAZ-400E, FAZ-1000D, FAZ-1000E, FAZ-2000E, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-3700F and FAZ-3900E.
FortiAnalyzer VM	FAZ-VM64, FAZ-VM64-AWS, FAZ-VM64-AWS-OnDemand, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-KVM, and FAZ-VM64-XEN (Citrix XenServer and Open Source Xen).

Minimum screen resolution

The recommended minimum screen resolution is 1280 x 800. Please adjust the screen resolution accordingly. Otherwise, the GUI may not display properly.

What's new in FortiAnalyzer version 5.6.0

The following is a list of new features and enhancements in FortiAnalyzer version 5.6.0.

Security Fabric

Security Fabric logging

- Store and analyze the logs from a Security Fabric as if it is from a *single* device
- Support dynamic data and metadata exchange with Security Fabric
- Synchronize the Security Fabric data and metadata from collector to analyzer
- Use the Security Fabric data in FortiView and Reports for additional visibility

Endpoint Telemetry support

Use the endpoint telemetry data collected by the Security Fabric agent to display user profile photos in reports and FortiView. This provides more visibility for user identity.

Security Fabric logging topology

- Display logging topology of the entire Security Fabric for additional visibility
- View the topology by device or by logging traffic

What's new in your Security Fabric report

Default report template for monitoring new users, devices, applications, vulnerabilities, threats and so on from the Security Fabric.

Security Fabric Widgets

A set of dashboard widgets displays current audit scores for a FortiGate security fabric cluster with recommended best practices and the historical audit scores and trends.

NOC/SOC Dashboard

- Purpose-designed dashboards for NOC/SOC operations
- Enhanced visualization for real-time activities and historical trends for analysts to effectively monitor network activities and security alerts

Log search

Log search performance has been improved.

Report templates

- GTP report template – new report template for FortiCarrier GTP traffic
- DNS report template – new report template for DNS traffic

New DNS log

- Support for the new DNS log type introduced in FortiOS 5.6
- DNS events are now logged with extra details for better visibility

Near real-time logging

Provide flexibility for logs to be forwarded in more granular frequency such as every minute or every five minutes.

JSON API

API support for Log View, FortiView, Reports and Event Management.

FortiClient EMS for Chromebook support

FortiClient Chromebook log support.

FortiAnalyzer-VM On-Demand for AWS

Support for self-validated, on-demand instances of FortiAnalyzer-VM for AWS.

Special Notices

This section highlights some of the operational changes that administrators should be aware of in FortiAnalyzer version 5.6.0.

Hyper-V FortiAnalyzer-VM running on an AMD CPU

A Hyper-V FAZ-VM running on a PC with an AMD CPU may experience a kernel panic. Fortinet recommends running VMs on an Intel-based PC.

IPsec connection to FortiOS for logging

FortiAnalyzer 5.4.2 and later does not support an IPsec connection with FortiOS 5.0/5.2. However UDP or TCP + reliable are supported.

Instead of IPsec, you can use the FortiOS reliable logging feature to encrypt logs and send them to FortiAnalyzer. You can enable the reliable logging feature on FortiOS by using the `configure log fortianalyzer setting` command. You can also control the encryption method on FortiOS by using the `set enc-algorithm default/high/low/disable` command.

Datasets Related to Browse Time

If upgrading from an image prior to FAZ 5.4.2, cloned datasets that query for browse time may not be able to return any results after upgrade.

FortiAnalyzer 5.4.2 contains enhancements to calculating the estimated browse time. Due to the changes, cloned datasets that query for browse time may not be able to return any results after upgrade.

System Configuration or VM License is Lost after Upgrade

When upgrading FortiAnalyzer from 5.4.0 or 5.4.1 to 5.4.x or 5.6.0, it is imperative to reboot the unit before installing the 5.4.x or 5.6.0 firmware image. Please see the *FortiAnalyzer Upgrade Guide* for details about upgrading. Otherwise, FortiAnalyzer may lose system configuration or VM license after upgrade. There are two options to recover the FortiAnalyzer unit:

1. Reconfigure the system configuration or add VM license via CLI with `execute add-vm-license <vm license>`.
2. Restore the 5.4.0 backup and upgrade to 5.4.2.

SSLv3 on FortiAnalyzer-VM64-AWS

Due to known vulnerabilities in the SSLv3 protocol, FortiAnalyzer-VM64-AWS only enables TLSv1 by default. All other models enable both TLSv1 and SSLv3. If you wish to disable SSLv3 support, please run:

```
config system global
    set ssl-protocol t1sv1
end
```

Pre-processing logic of ebtime

Logs with the following conditions met are considered usable for the calculation of estimated browsing time:

Traffic logs with `logid` of `13` or `2`, when `logid == 13`, `hostname` must not be empty. The `service` field should be either `HTTP`, `80/TCP` or `443/TCP`.

If all above conditions are met, then `devid`, `vdom`, and `user` (`srcip` if `user` is empty) are combined as a key to identify a user. For time estimation, the current value of `duration` is calculated against history session start and end time, only un-overlapped part are used as the `ebtime` of the current log.

Port 8443 reserved

Port 8443 is reserved for `https-logging` from FortiClient EMS for Chromebooks.

Upgrade Information

Upgrading to FortiAnalyzer 5.6.0

You can upgrade FortiAnalyzer 5.4.0 or later directly to 5.6.0.

If you are upgrading from versions earlier than 5.4.0, you must upgrade to FortiAnalyzer 5.4 first. (We recommend that you upgrade to 5.4.3, the latest version of FortiAnalyzer 5.4.)

For details about upgrading your FortiAnalyzer, see *FortiAnalyzer Upgrade Guide*.

ESX VM network mapping after upgrade

Starting with FortiAnalyzer 5.6.0, Fortinet changed the network interface mapping as shown below. After upgrade to FortiAnalyzer 5.6.0, you must edit ESX VM network mapping in order to preserve network connectivity.

- port1 -> Network Adapter 1
- port2 -> Network Adapter 2
- port3 -> Network Adapter 3
- port4 -> Network Adapter 4

New FortiAnalyzer 5.6.0 VM installations use the correct mapping with ESX 5.5 and later.

Downgrading to previous versions

FortiAnalyzer does not provide a full downgrade path. You can downgrade to a previous firmware release via the GUI or CLI, but doing so results in configuration loss. A system reset is required after the firmware downgrading process has completed. To reset the system, use the following CLI commands via a console port connection:

```
execute reset all-settings
execute format {disk | disk-ext4}
```

Firmware image checksums

The MD5 checksums for all Fortinet software and firmware releases are available at the Customer Service & Support portal, https://support.fortinet.com. To verify the integrity of the download, select the *Checksum* link next to the *HTTPS* download link. A dialog box will be displayed with the image file name and checksum code. Compare this checksum with the checksum of the firmware image.

FortiAnalyzer VM firmware

Fortinet provides FortiAnalyzer VM firmware images for Amazon AWS, Citrix and Open Source XenServer, Linux KVM, Microsoft Hyper-V Server, and VMware ESX/ESXi virtualization environments.

Amazon Web Services

- The 64-bit Amazon Machine Image (AMI) is available on the AWS marketplace.

Citrix XenServer and Open Source XenServer

- `.out`: Download the 64-bit firmware image to upgrade your existing FortiAnalyzer VM installation.
- `.out.OpenXen.zip`: Download the 64-bit package for a new FortiAnalyzer VM installation. This package contains the QCOW2 file for the Open Source Xen Server.
- `.out.CitrixXen.zip`: Download the 64-bit package for a new FortiAnalyzer VM installation. This package contains the Citrix XenServer Disk (VHD), and OVF files.

Linux KVM

- `.out`: Download the 64-bit firmware image to upgrade your existing FortiAnalyzer VM installation.
- `.out.kvm.zip`: Download the 64-bit package for a new FortiAnalyzer VM installation. This package contains QCOW2 that can be used by qemu.

Microsoft Azure

The files for Microsoft Azure have AZURE in the filenames, for example `FAZ_VM64_AZURE-v<number>-build<number>-FORTINET.out.hyperv.zip`.

- `.out`: Download the firmware image to upgrade your existing FortiAnalyzer VM installation.
- `.hyperv.zip`: Download the package for a new FortiAnalyzer VM installation. This package contains a Virtual Hard Disk (VHD) file for Microsoft Azure.

Microsoft Hyper-V Server

The files for Microsoft Hyper-V Server have HV in the filenames, for example, `FAZ_VM64_HV-v<number>-build<number>-FORTINET.out.hyperv.zip`.

- `.out`: Download the firmware image to upgrade your existing FortiAnalyzer VM installation.
- `.hyperv.zip`: Download the package for a new FortiAnalyzer VM installation. This package contains a Virtual Hard Disk (VHD) file for Microsoft Hyper-V Server.

Microsoft Hyper-V 2016 is supported.

VMware ESX/ESXi

- `.out`: Download either the 64-bit firmware image to upgrade your existing VM installation.
- `.ovf.zip`: Download either the 64-bit package for a new VM installation. This package contains an Open Virtualization Format (OVF) file for VMware and two Virtual Machine Disk Format (VMDK) files used by the OVF file during deployment.

For more information see the FortiManager product data sheet available on the Fortinet web site, http://www.fortinet.com/products/fortimanager/virtual-security-management.html. VM installation guides are available in the Fortinet Document Library.

SNMP MIB files

You can download the *FORTINET-FORTIMANAGER-FORTIANALYZER.mib* MIB file in the firmware image file folder. The Fortinet Core MIB file is located in the main FortiAnalyzer v5.00 file folder.

Product Integration and Support

FortiAnalyzer version 5.6.0 support

The following table lists FortiAnalyzer version 5.6.0 product integration and support information:

Web Browsers	• Microsoft Internet Explorer version 11 • Mozilla Firefox version 54 • Google Chrome version 58 Other web browsers may function correctly, but are not supported by Fortinet.
FortiOS/FortiOS Carrier	• 5.6.0 • 5.4.0 to 5.4.5 • 5.2.0 to 5.2.10
FortiAnalyzer	• 5.6.0 • 5.4.0 to 5.4.3 • 5.2.0 to 5.2.9 • 5.0.0 to 5.0.13
FortiCache	• 4.1.3 • 4.0.4
FortiClient	• 5.6.0 • 5.4.0 and later • 5.2.0 and later • 5.0.4 and later
FortiMail	• 5.3.8 • 5.2.9 • 5.1.6 • 5.0.10
FortiManager	• 5.6.0 • 5.4.0 to 5.4.3 • 5.2.0 and later • 5.0.0 and later

FortiSandbox	• 2.4.1 • 2.4.0 • 2.3.2 • 2.2.2 • 2.1.3 • 2.0.3 • 1.4.0 and later • 1.3.0 • 1.2.0 and 1.2.3
FortiSwitch ATCA	• 5.0.0 and later • 4.3.0 and later • 4.2.0 and later
FortiWeb	• 5.8.1 • 5.8.0 • 5.7.0 • 5.6.0 • 5.5.4 • 5.4.1 • 5.3.8 • 5.2.4 • 5.1.4 • 5.0.6
FortiDDoS	• 4.2.3 • 4.1.12
FortiAuthenticator	• 4.2.0

Virtualization	• Amazon Web Service AMI, Amazon EC2, Amazon EBS
	• Citrix XenServer 6.2
	• Linux KVM Redhat 6.5
	• Microsoft Azure
	• Microsoft Hyper-V Server 2008 R2, 2012 & 2012 R2
	• OpenSource XenServer 4.2.5
	• VMware:
	  • ESX versions 4.0 and 4.1
	  • ESXi versions 4.0, 4.1, 5.0, 5.1, 5.5, 6.0 and 6.5

Always review the Release Notes of the supported platform firmware version before upgrading your device.

Feature support

The following table lists FortiAnalyzer feature support for log devices.

Platform	Log View	FortiView	Event Management	Reports
FortiGate	✓	✓	✓	✓
FortiCarrier	✓	✓	✓	✓
FortiAnalyzer	✓		✓	
FortiCache	✓		✓	✓
FortiClient registered to FortiGate	✓	✓		✓
FortiClient registered to FortiClient EMS	✓	✓		✓
FortiDDoS	✓	✓	✓	✓
FortiMail	✓		✓	✓
FortiManager	✓		✓	
FortiSandbox	✓		✓	✓
FortiWeb	✓		✓	✓
Syslog	✓		✓	

FortiGate Management

You can enable FortiManager features on some FortiAnalyzer models. FortiAnalyzer models with FortiManager features enabled can manage a small number of FortiGate devices, and all but a few FortiManager features are enabled on FortiAnalyzer. The following table lists the supported modules for FortiAnalyzer with FortiManager Features enabled:

FortiManager Management Modules	FortiAnalyzer with FortiManager Features Enabled
Device Manager, except firmware and license management	✓
Policy & Objects	✓
AP Manager	✓
FortiClient Manager	✓
VPN Manager	✓
FortiGuard	
FortiMeter	
FGT-VM License Activation	

Language support

The following table lists FortiAnalyzer language support information.

Language	GUI	Reports
English	✓	✓
Chinese (Simplified)	✓	✓
Chinese (Traditional)	✓	✓
French		✓
Hebrew		✓
Hungarian		✓
Japanese	✓	✓
Korean	✓	✓
Portuguese		✓
Russian		✓
Spanish		✓

To change the FortiAnalyzer language setting, go to *System Settings* > *Admin* > *Admin Settings*, in *Administrative Settings* > *Language* select the desired language from the drop-down list. The default value is *Auto Detect*.

Russian, Hebrew, and Hungarian are not included in the default report languages. You can import language translation files for these languages via the command line interface using one of the following commands:

```
execute sql-report import-lang <language name> <ftp> <server IP address> <user name>
    <password> <file name>
execute sql-report import-lang <language name> <sftp <server IP address> <user name>
    <password> <file name>
execute sql-report import-lang <language name> <scp> <server IP address> <user name>
    <password> <file name>
execute sql-report import-lang <language name> <tftp> <server IP address> <file name>
```

For more information, see the *FortiAnalyzer CLI Reference*.

Supported models

The following tables list which FortiGate, FortiCarrier, FortiDDoS, FortiAnalyzer, FortiMail, FortiManager, FortiWeb, FortiCache, and FortiSandbox models and firmware versions can log to a FortiAnalyzer appliance running version 5.6.0. Please ensure that the log devices are supported before completing the upgrade.

Software license activated LENC devices are supported, if their platforms are in the supported models list. For example, support of FG-3200D indicates support of FG-3200D-LENC.

FortiGate models

Model	Firmware Version
FortiGate: FG-30D, FG-30D-POE, FG-30E, FG-30E,3G4G-INTL, FG-30E,3G4G,NAM, FG-50E, FG-51E, FG-52E, FG-60D, FG-60D-POE, FG-60E, FG-61E, FG-70D, FG-70D-POE, FG-80C, FG-80CM, FG-80D, FG-80E, FG-80E-POE, FG-81E, FG81E-POE, FG90D, FG-90D-POE, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-100E, FG-100EF, FG-101E, FG140D, FG-140D-POE, FG-140E, FG-140E-POE, FG-200D, FG-200D-POE, FG-240D, FG-240-POE, FG-280D-POE, FG-300D, FG-400D, FG-500D, FG-600C,FG-600D, FG-800C, FG-800D, FG-900D, FG-1000C, FG-1000D, FG-1200D, FG-1500D, FG-1500DT, FG-3000D, FG-3100D, FG-3200D, FG3240C, FG-3600C, FG-3700D, FG-3800D, FG-3810D, FG-3815D, **FortiGate 5000 Series:** FG-5001C, FG-5001D, FG-5001E **FortiGate DC:** FG-80C-DC, FG-600C-DC, FG-800C-DC, FG-1000C-DC, FG-1500D-DC, FG-3000D-DC, FG-3100D-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, FG-3700D-DC, FG-3800D-DC, FG-3810D-DC, FG-3815D-DC **FortiGate Low Encryption:** FG-80C-LENC, FG-100D-LENC, FG-600C-LENC, FG-1000C-LENC **FortiWiFi:** FWF-30D, FWF-30D-POE, FWF-30E, FWF-30E-3G4G-INTL, FWF-30E-3G4G-NAM, FWF-50E, FWF-50E-2R, FWF-51E, FWF-60D, FWF-60D-POE, FWF-60E, FWF-61E, FWF-80CM, FWF-81CM, FWF-90D, FWF-90D-POE, FWF-92D **FortiGate VM:** FG-VM64, FG-VM64-AWS, FG-VM64-AWSONDEMAND, FG-VM64-HV, FG-VM64-KVM, FG-VM64-XEN, FG-VMX-Service-Manager, FOSVM64, FOSVM64-KVM **FortiGate Rugged:** FGR-30D, FGR-35D, FGR-60D, FGR-90D	5.6

Model	Firmware Version
FortiGate: FG-30D, FG-30D-POE, FG-30E, FG-30E-3G4G-INTL, FG-30E-3G4G-NAM, FG-50E, FG-51E, FG-52E, FG-60D, FG-60D-POE, FG-60E, FG-61E, FG-70D, FG-70D-POE, FG-80C, FG-80CM, FG-80D, FG-90D, FG-90D-POE,FG-90E, FG-91E, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-100E, FG-101E, FG-140D, FG-140D-POE, FG-200D, FG-200D-POE, FG-240D, FG-240D-POE, FG-280D-POE, FG-200E, FG-201E, FGT-300D, FG-400D, FG-500D, FG-600C, FG-600D, FG-800C, FG-800D, FG-900D, FG-1000C, FG-1000D, FG-1200D, FG-1500D, FG-1500DT, FG-3000D, FG-3100D, FG-3200D, FG-3240C, FG-3600C, FG-3700D, FG-3700DX, FG-3810D, FG-3815D, FG-2000E, FG-2500E, FG 3800D, FG-7040E-1, FG-7040E-2, FG-7040E-3, FG-7040E-4, FG-7040E-5,FG-7040E-6, FG-7060E-1, FG-7060E-2, FG-7060E-3, FG-7060E-4, FG-7060E-5,FG-7060E-6 **FortiGate 5000 Series:** FG-5001C, FG-5001D **FortiGate DC:** FG-80C-DC, FG-600C-DC, FG-800C-DC, FG-1000C-DC, FG-1500D-DC, FG-3000D-DC, FG-3100D-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, FG-3700D-DC, FG-3800D-DC, FG-3810D-DC **FortiGate Low Encryption:** FG-80C-LENC, FG-100D-LENC, FG-600C-LENC, FG-1000C-LENC **FortiWiFi:** FWF-30D, FWF-30E, FWF-30E-3G4G-INTL, FWF-30E-3G4G-NAM, FWF-50E, FWF-50E-2R, FWF-51E, FWF-30D-POE, FWF-60D, FWF-60D-POE, FWF-90D, FWF-90D-POE, FWF-92D, FWF-60E, FWF-61E, FWF-80CM, FWF-81CM **FortiGate VM:** FG-VM, FG-VM64, FG-VM64-AWS, FG-VM64-AWSONDEMAND, FG-VM64-HV, FG-VM64-KVM, FG-VM64-XEN, FG-VMX-Service-Manager **FortiGate Rugged:** FGR-30D, FGR-35D, FGR-60D, FGR-90D	5.4

Model	Firmware Version
FortiGate: FG-20C, FG-20C-ADSL-A, FG-30D, FG-30D-POE, FG-40C, FG-60C, FG-60C-POE, FG-60C-SFP, FG-60D, FG-60D-3G4G-VZW, FG-60D-POE, FG-70D, FG-70D-POE, FG-80C, FG-80CM, FG-80D, FG-90D, FG-90D-POE, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-110C, FG-111C, FG-140D, FG-140D-POE, FG-140D-POE-T1, FG-200B, FG-200B-POE, FG-200D, FG-200D-POE, FG-240D, FG-240D-POE, FG-280D-POE, FG-300C, FG-300D, FG-310B, FG-311B, FG-400D, FG-500D, FG-600D, FG-900D, FG-600C, FG-620B, FG-621B, FG-800C, FG-800D, FG-1000C, FG-1000D, FG-1200D, FG-1240B, FG-1500D, FG-1500DT, FG-3000D, FG-3016B, FG-3040B, FG-3100D, FG-3140B, FG-3200D, FG-3240C, FG-3600C,FG-3700D, FG-3700DX, FG-3810A, FG-3810D, FG-3815D, FG-3950B, FG-3951B **FortiGate 5000 Series:** FG-5001A, FG-5001A-SW, FG-5001A-LENC, FG-5001A-DW-LENC, FG-5001A-SW-LENC, FG-5001B, FG-5001C, FG-5001D, FG-5101C **FortiGate DC:** FG-80C-DC, FG-300C-DC, FG-310B-DC, FG-600C-DC, FG-620B-DC, FG-621B-DC, FG-800C-DC, FG-1000C-DC, FG-1240B-DC, FGT-1500D-DC, FG-3000D-DC, FG-3040B-DC, FG-3100D-DC, FG-3140B-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, G-3700D-DC, FG-3810A-DC, FG-3810D-DC, FG-3815D-DC, FG-3950B-DC, FG-3951B-DC **FortiGate Low Encryption:** FG-20C-LENC, FG-40C-LENC, FG-60C-LENC, FG-80C-LENC, FG-100D-LENC, FG-200B-LENC, FG-300C-LENC, FG-620B-LENC, FG-1000C-LENC, FG-1240B-LENC, FG-3040B-LENC, FG-310B-LENC, FG-600C-LENC, FG-3140B-LENC, FG-3810A-LENC, FG-3950B-LENC **FortiWiFi:** FWF-20C, FWF-20C-ADSL-A, FWF-30D, FWF-30D-POE, FWF-40C, FWF-60C, FWF-60CM, FWF-60CX-ADSL-A, FWF-60D, FWF-60D-3G4G-VZW, FWF-60D-POE, FWF-80CM, FWF-81CM, FWF-90D, FWF-90D-POE, FWF-92D **FortiGate Rugged:** FGR-60D, FGR-100C **FortiGate VM:** FG-VM-Azure, FG-VM, FG-VM64, FG-VM64-HV, FG-VM64-KVM, FG-VM64-XEN **FortiSwitch:** FS-5203B, FCT-5902D	5.2

FortiCarrier Models

Model	Firmware Version
FortiCarrier: FCR-3000D, FCR-3100D, FCR-3200D, FCR-3700D, FCR-3700DX, FCR-3800D, FCR-3810D, FCR-3815D, FCR-5001C, FCR-5001D, FCR-3000D-DC, FCR-3100D-DC, FCR-3200D-DC, FCR-3240C, FCR-3600C, FCR-3700D-DC, FCR-3810D-DC, FCR-5001C **FortiCarrier DC:** FCR-3000D-DC, FCR-3100D-DC, FCR-3200D-DC, FCR-3240C-DC, FCR-3600C-DC, FCR-3700D-DC, FCR-3810D-DC, FCR-3815D-DC **FortiCarrier VM:** FCR-VM, FCR-VM64, FCR-VM64-AWS, FCR-VM64-AWSONDEMAND, FCR-VM64-HV, FCR-VM64-KVM	5.4
FortiCarrier: FCR-3000D, FCR-3100D, FCR-3200D, FCR-3240C, FCR-3600C, FCR-3700D, FCR-3700DX, FCR-3810A, FCR-3810D, FCR-3815D, FCR-3950B, FCR-3951B, FCR-5001A, FCR-5001B, FCR-5001C,FCR-5001D, FCR-5101C, FCR5203B, FCR-5902D **FortiCarrier DC:** FCR-3000D-DC, FCR-3100D-DC, FCR-3200D-DC, FCR-3700D-DC, FCR-3810D-DC **FortiCarrier Low Encryption:** FCR-5001A-DW-LENC **FortiCarrier VM:** FCR-VM, FCR-VM64, FCR-VM64-HV, FCR-VM64-KVM, FCR-Vm64-XEN, FCR-VM64-AWSONDEMAND	5.2

FortiDDoS models

Model	Firmware Version
FortiDDoS: FI-200B, FI-400B, FI-600B, FI-800B, FI-900B, FI-1000B, FI-1200B, FI-2000B	4.2, 4.1, 4.0

FortiAnalyzer models

Model	Firmware Version
FortiAnalyzer: FAZ-200D, FAZ-300D, FAZ-400E, FAZ-1000D, FAZ-1000E, FAZ-2000E, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, and FAZ-3900E. **FortiAnalyzer VM:** FAZ-VM64, FAZ-VM64-AWS, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-KVM, and FAZ-VM64-XEN (Citrix XenServer and Open Source Xen).	5.6

Model	Firmware Version
FortiAnalyzer: FAZ-200D, FAZ-300D, FAZ-400E, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-2000E, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-3900E, and FAZ-4000B. **FortiAnalyzer VM:** FAZ-VM64, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-XEN (Citrix XenServer and Open Source Xen), FAZ-VM64-KVM, and FAZ-VM64-AWS.	5.4
FortiAnalyzer: FAZ-100C, FAZ-200D, FAZ-200E, FAZ-300D, FAZ-400C, FAZ-400E, FAZ-1000C, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-3900E, FAZ-4000B **FortiAnalyzer VM:** FAZ-VM, FAZ-VM-AWS, FAZ-VM64, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-KVM, FAZ-VM64-XEN	5.2
FortiAnalyzer: FAZ-100C, FAZ-200D, FAZ-200E, FAZ-300D, FAZ-400B, FAZ-400C, FAZ-400E, FAZ-1000B, FAZ-1000C, FAZ-1000D, FAZ-1000E, FAZ-2000A, FAZ-2000B, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-4000A, FAZ-4000B **FortiAnalyzer VM:** FAZ-VM, FAZ-VM64, FAZ-VM64-AWS, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM-KVM, FAZ-VM-XEN	5.0

FortiMail models

Model	Firmware Version
FortiMail: FE-60D, FE-200D, FE-200E, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-2000E, FE-3000C, FE-3000D, FE-3000E, FE-3200E, FE-5002B **FortiMail Low Encryption:** FE-3000C-LENC **FortiMail VM:** FE-VM64, FE-VM64-HV, FE-VM64-XEN	5.3.7
FortiMail: FE-60D, FE-200D, FE-200E, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-3000C, FE-3000D, FE-5002B **FortiMail VM:** FE-VM64, FE-VM64-HV, FE-VM64-XEN	5.2.8
FortiMail: FE-100C, FE-200D, FE-200E, FE-400B, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-3000C, FE-3000D, FE-5001A, FE-5002B **FortiMail VM:** FE-VM64	5.1.6
FortiMail: FE-100C, FE-200D, FE-200E, FE-400B, FE-400C, FE-1000D, FE-2000A, FE-2000B, FE-3000C, FE-3000D, FE-4000A, FE-5001A, FE-5002B **FortiMail VM:** FE-VM64	5.0.10

FortiSandbox models

Model	Firmware Version
FortiSandbox: FSA-1000D, FSA-3000D, FSA-3000E, FSA-3500D **FortiSandbox VM:** FSA-VM	2.3.2
FortiSandbox: FSA-1000D, FSA-3000D, FSA-3500D **FortiSandbox VM:** FSA-VM	2.2.0 2.1.0
FortiSandbox: FSA-1000D, FSA-3000D **FortiSandbox VM:** FSA-VM	2.0.0 1.4.2
FortiSandbox: FSA-1000D, FSA-3000D	1.4.0 and 1.4.1 1.3.0 1.2.0 and later

FortiSwitch ACTA models

Model	Firmware Version
FortiController: FTCL-5103B, FTCL-5902D, FTCL-5903C, FTCL-59	5.2.0
FortiSwitch-ATCA: FS-5003A, FS-5003B **FortiController:** FTCL-5103B, FTCL-5903C, FTCL-5913C	5.0.0
FortiSwitch-ATCA: FS-5003A, FS-5003B	4.3.0 4.2.0

FortiWeb models

Model	Firmware Version
FortiWeb: FWB-2000E	5.6.0
FortiWeb: FWB-100D, FWB-400C, FWB-400D, FWB-1000C, FWB-1000D, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-3010E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM-64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, FWB-HYPERV, FWB-KVM, FWB-AZURE	5.5.3

Model	Firmware Version
FortiWeb: FWB-100D, FWB-400C, FWB-1000C, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, FWB-HYPERV	5.4.1
FortiWeb: FWB-100D, FWB-400B, FWB-400C, FWB-1000B, FWB-1000C, FWB-1000D, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, and FWB-HYPERV	5.3.8
FortiWeb: FWB-100D, FWB-400B, FWB-400C, FWB-1000B, FWB-1000C, FWB-1000D, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-HYPERV,FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER	5.2.4

FortiCache models

Model	Firmware Version
FortiCache: FCH-400C, FCH-400E, FCH-1000C, FCH-1000D, FCH-3000C, FCH-3000D, FCH-3900E **FortiCache VM:** FCH-VM64, FCH-KVM	4.1
FortiCache: FCH-400C, FCH-400E, FCH-1000C, FCH-1000D, FCH-3000C, FCH-3000D, FCH-3900E **FortiCache VM:** FCH-VM64	4.0

Resolved Issues

The following issues have been fixed in FortiAnalyzer version 5.6.0. For inquires about a particular bug, please contact Customer Service & Support.

Device Manager

Bug ID	Description
306276	FortiCarrier ADOM should not be displayed when no device is registered.
376207	FortiAnalyzer may show incorrect version for FortiDDoS devices.
382811	FortiAnalyzer should be able to sustain stable connections with more than 3500 devices and able to receive logs successfully.
382831	After user deletes a VDOM on FortiGate, the VDOM may not be removed on FortiAnalyzer.
392665	FortiAnalyzer may not support HA configurations for non-FortiGate devices.
404468	FortiAnalyzer may not support grouping logs from the same FortiWeb HA cluster.
416886	FortiAnalyzer may use FortiSandboxs' serial number as its hostname.
434907	Log insert rate may be unstable if there are many ADOMs.
438292	There may be wrong VDOMs generated for FortiSandbox.

Event Management

Bug ID	Description
385275	The HA failover event handler cannot be triggered.
404888	The Event Handler List may become empty after FortiAnalyzer is upgraded.
424365	Users may not be able to have hostname in the subject of alert email.

FortiView

Bug ID	Description
308171	Aggregated Dialed Time is incorrectly calculated in VPN-Top-Dial-Up and VPN-Users-By-Duration datasets.
382557	Drop box may become too narrow to view and select FortiGate device.
387209	FortiGate devices that query FortiGuard should not be flagged as highly suspicious.
390173	FortiAnalyzer is unable to display part of the DLP content.
393129	CVE-ID link may not work if there are multiple CVE-IDs.
393615	FortiAnalyzer should return the correct results when the source filed is used within filter.
394149	Duplicated VD information is found when forwarding FortiGate 5.4 logs as syslog or in CEF format.
395191	UTM Deny logs are displayed with no action on FortiAnalyzer's GUI.
397036	FortiAnalyzer should accept more characters for log view and policy search.

Logging

Bug ID	Description
378763	When SFTP server is down, FortiAnalyzer should continue to try to re-establish SFTP connection.
383238	FortiAnalyzer should increase the limit for the number of aggregated clients.
388619	FortiClient log forwarding may not be real-time.
395041	Some traffic logs may be shown as not scanned by FortiGate.
395089	Auto-delete is still running after changed the status from enable to disable.
401257	FortiAnalyzer may return `Internal error` when uploading logs.
405407	The upload process may attempt three times to upload a log file that is no longer available.

Reporting

Bug ID	Description
234007	Estimated browsing time dataset should pull log data according to time period specified.
383955	GUI fails to display chart library if there is a chart with invalid table columns.
384890	There may be no chart output in html/pdf/sml reports when users set `max-table-rows` to 100k.
390502	FortiAnalyzer should allow cloning of *User Top 500 Websites by Bandwidth* or *User Top 500 Websites by Session* reports.
391482	User changes on LDAP server may not get updated on FortiAnalyzer for the user filter in reports.
397822	Users may not be able to generate custom reports after resizing FAZ-VM disk and rebuilding DB.
410771	FortiAnalyzer may not support the usage of device name in report titles.
411971	The query area in a dataset may not be adjustable after expanding.
415096	The dataset `fct-Top-Infected-Devices-with-Virus-Malware` may not cover both Tlog and Elog.

System Settings

Bug ID	Description
366224	FortiAnalyzer generates invalid Event logs on auto deleting policy from ADOM.
391076	Qmail server is rejecting Email from FortiAnalyzer as the mail body contains bare LFs.
415536	Log roll may be delayed when the log roll time is set at the default 0:00.

Others

Bug ID	Description
376758	FortiAnalyzer needs a diagnostic command to show supported platforms.

Bug ID	Description
388053	`Resize2fs` may not allow LVM to extend size over 16TB.
388071	FortiAnalyzer may not be able to render a proper web GUI page when making a change.
391900	Scheduled log ftp backup may not be successful.
399792	The XML API, `searchFazLog`, cannot find logs when deviceName is the same as the HA cluster name.
400905	Both commands, `execute log device logstore clear <device_id>` and `execute log device logstore clear ALL`, may not work.
405163	The password for the FTP server to receive reports may be corrupted after upgrading.
411825	Corrupted logs may impact rebuilding ADOM/DB.
412199	FortiAnalyzer may fail to restore logs via SCP.
412606	The command execute `sql-report list-lang` may be empty.
412636	The SNMP trap with `OID fmTrapLogRateThreshold` may be triggered too often.
418215	`oftpd` stops working and may prevent users from logging in from GUI.

Common Vulnerabilities and Exposures

Bug ID	Description
389255	FortiAnalyzer 5.6.0 is no longer vulnerable to the following CVE-References: • 2016-6308 • 2016-6307 • 2016-6306 • 2016-6305 • 2016-6304 • 2016-6303 • 2016-6302 • 2016-2183 • 2016-2182 • 2016-2181 • 2016-2179 • 2016-2178 • 2016-2177 Visit https://fortiguard.com/psirt for more information.

Bug ID	Description
389615	FortiAnalyzer 5.6.0 is no longer vulnerable to the following CVE-References: • 2016-6309 • 2016-7052 Visit https://fortiguard.com/psirt for more information.
390355	FortiAnalyzer 5.6.0 is no longer vulnerable to the following CVE-Reference: • 2016-6153 Visit https://fortiguard.com/psirt for more information.
416912	FortiAnalyzer 5.6.0 is no longer vulnerable to the following CVE-References: • 2016-10229 Visit https://fortiguard.com/psirt for more information

Known Issues

The following issues have been identified in FortiAnalyzer version 5.6.0. For inquires about a particular bug or to report a bug, please contact Fortinet Customer Service & Support.

Device Manager

Bug ID	Description
408102	FortiAnalyzer may not support VDOM names longer than 11 characters.
440406	VDOM in TP mode may be shown as NAT in Device Manager.
443087	In Advanced ADOM mode, after FortiGate replacement, the root ADOM may show logs belong to other ADOMs.

FortiView

Bug ID	Description
439700	Some IPS threats may not be shown in FortiView.
441672	SSLVPN Web Users may not be shown in FortiView.

Logging

Bug ID	Description
406786	FortiAnalyzer cannot show storage statistics and return an error.
439561	FortiAnalyzer may stop receiving logs from a FortiGate cluster as scheduled.

Reporting

Bug ID	Description
435314	The report filter may support only one criteria for each log field.

Bug ID	Description
443335	There may be no data on user details browsing report.
443253	User may lose report configuration/event handle following an upgrade.
441386	Commas in chart column title may cause `run_rpt` crashes.
443462	`sqlreportd` may crash

System settings

Bug ID	Description
395243	The event log for downloading/deleting/importing a log file may display an incorrect user name.
409905	Users may encounter *Web Server Error 500* when they try to login FortiAnalyzer via GUI.
439805	There may be log insert lag even if there is no logs incoming.

Others

Bug ID	Description
400609	`sqllogd` may use previously configured DNS server till it restarts.
442968	Users may not be able to backup logs via SCP.